

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Sheet 1 of 4

Application Number	10/634,718
Filing Date	08-05-2003
First Named Inventor	Daniel Fred Ortwine
Art Unit	1624
Examiner Name	Kahsay Habte
Attorney Docket Number	PC25319A

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.*	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code* Number* Kind Code* (if known)	MM-DD-YYYY		T ⁶
KM		WO 01/63244 A1	08-30-2001	Chen, et al	
		WO 00/09485 A1	02-24-2000	McClure, et al	
		WO 01/12611 A1	02-22-2001	Blagg	
		WO 02/34726 A2	05-02-2002	Noe, et al	
		WO 02/34753 A2, A3	05-02-2002	Bronk, et al	
✓		EP 0 935 963 A2	08-18-1999	McClure, et al	

Examiner Signature	<i>A. M. Hoss</i>	Date Considered	1/3/2005
--------------------	-------------------	-----------------	----------

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments or the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



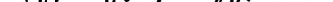
Substitute for form 1440(B)(2)

SUPPLEMENTAL

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Sheet 2 of 4

C omplete if Known	
Application Number	10/634,718
Filing Date	08-05-2003
First Named Inventor	Daniel Fred Ortwinne
Art Unit	1624
Examiner Name	Kahsay Habte
Attorney Docket Number	PC25319A

Examiner Signature		Date Considered	1/3/2005
--------------------	---	-----------------	----------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ²Applicant's unique citation designation number (optional). ³See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁷Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known

Substitute for form 1449/PTO

SUPPLEMENTAL

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

3

of

4

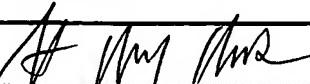
Application Number	10/634,718
Filing Date	08/05/200
First Named Inventor	Daniel Fred Ortwin
Art Unit	1624
Examiner Name	Kahsay Habte

Attorney Docket Number

PC25319A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
KH		HIROTA, et al., "Novel Synthesis of Pyrido[3,4-d]pyrimidines, Pyrido[2,3-d]-pyrimidines, and Quinazolines via Palladium-Catalyzed Oxidative coupling", Heterocycles, 1994; 37(1):563-570	
		CHEN, et al., "Structure-Based Design of a Novel, Potent, and Selective Inhibitor for MMP-13 Utilizing NMR Spectroscopy and Computer-Aided Molecular Design", J.Am.Chem.Soc., 2000; 122, 9648-9654	
		LOVEJOY, et al., "Crystal structures of MMP-1 and -13 reveal the structural basis for selectivity of collagenase inhibitors", Nature Structural Biol., 1999; 6:217-221	
		MOY, et al., High-resolution solution structure of the catalytic fragment of human collagenase-3 (MMP-13) complexed with a hydroxamic acid inhibitor", J. Mol. Biol., 2000; 302:671-689	
		MITCHELL, et al., "Cloning, Expression, and Type II Collagenolytic Activity of Matrix Metalloproteinase-13 from Human Osteoarthritic Cartilage", J. Clin. Invest., 1996; 97(3):761-768	
		NEUHOLD, et al., "Postnatal expression in hyaline cartilage of constitutively active human collagenase-3 (MMP-13) induces osteoarthritis in mice", J. Clin. Invest., 2001; 107: 35-44	
		DAHLBERG, et al., "Selective Enhancement of Collagenase-Mediated Cleavage of Resident Type II Collagen in Cultured Osteoarthritic Cartilage and Arrest with a Synthetic Inhibitor that Spares Collagenase I (Matrix Metalloproteinase 1)", Arthritis & Rheum., 2000; 43(3): 673-682	
		BILLINGHURST, et al., "Comparison of the Degradation of Type II Collagen and Proteoglycan in Nasal and Articular Cartilages Induced by Interleukin-1 and the Selective Inhibition of Type II Collagen Cleavage by Collagenase", Arthritis & Rheum., 2000; 43(3): 664-672	
		BILLINGHURST, et al., "Enhanced Cleavage of Type II Collagen by Collagenases in Osteoarthritic Articular Cartilage", J. Clin. Invest., 1997; 99:1534-1545	
✓		Office Action Mailed 06/16/2003 in U.S. Patent Application No. 10/264,764 (PC20536A)	

Examiner Signature		Date Considered	1/3/2005
--------------------	---	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 509. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

SUPPLEMENTAL**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/634,718
Filing Date	08-05-2003
First Named Inventor	Daniel Fred Ortwinne
Art Unit	1624
Examiner Name	Kahsay Habte

Sheet

4

of

4

Attorney Docket Number

PC25319

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
XH		FREEMONT, et al., "In situ zymographic localisation of type II collagen degrading activity in osteoarthritic human articular cartilage", Ann. Rheum. Dis. 1999; 58:357-365	
KN		REBOUL, et al., "the New Collagenase, Collagenase-3, Is Expressed and Synthesized by Human Chondrocytes but not by Synoviocytes", J.Clin.Invest., 1996; 97(9):2011-2019	
KN		WERNICKE, et al., "Cloning of Collagenase 3 from the Synovial Membrane and Its Expression in Rheumatoid Arthritis and Osteoarthritis", J. Rheum. 1996; 23(4):590-595	

Examiner Signature		Date Considered	1/3/2005
--------------------	--	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.